Abstract

To formalize, using process algebra, the process of automatic generation of software together with the semantics of Lyee generated software.

The present invention includes: a first step of declaring (defining) a user requirement to be mounted as one program as statements declared by word and grouped by logical record, each of which has a word name, a definition expression, a condition for executing the definition expression, an input/output attribute, and an attribute of a value of the word; a second step of preparing, from the statements by word, signification vectors (L_2, L_3, L_4) and action vectors (I_2, O_4, S_4), each of which is a modules of a process cell having input/output channels based on the Lyee-calculus; a third step of assembling the signification vectors and the action vectors into a set having the set condition that interactions among it is caused by a command from the same screen; a fourth step of placing one control function module Φ to each of the sets; and a fifth step of placing one control function module Ψ in the program.